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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/777,946	02/06/2001	Hideo Kawahara	1232-4680	3252

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EXAMINER

VIEAUX, GARY

ART UNIT	PAPER NUMBER
2612	

2612

DATE MAILED: 06/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No. 09/777,946	Applicant(s) KAWAHARA, HIDEO
Examiner Gary C. Vieaux	Art Unit 2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 06 February 2001.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-26 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-26 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 06 February 2001 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
- 1) Certified copies of the priority documents have been received.
 - 2) Certified copies of the priority documents have been received in Application No. _____.
 - 3) Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Drawings

1. Figures 2 and 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Steinberg et al. (US #6,151,073.)

4. Regarding claim 1, Steinberg teaches an apparatus comprising: (A) a photometric unit for receiving object light and converting the object light into luminance signals of a plurality of areas (col. 5 lines 10-15); and

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(B) a control unit for calculating a histogram of a luminance distribution on the basis of the luminance signals of the plurality of areas converted by said photometric unit (col. 5 lines 33-37), said control unit controlling operation of an illumination device for illuminating an object based on a result of the calculating (col. 5 lines 46-49.)

5. Regarding claim 2, Steinberg teaches all the limitations of claim 1 (see the 102 rejection to claim 1 supra), in addition to teaching an apparatus wherein said photometric unit includes an image sensing element for converting object light into a video signal for photographing operation (col. 2 line 62.)

6. Regarding claim 3, Steinberg teaches all the limitations of claim 1 (see the 102 rejection to claim 1 supra), in addition to teaching an apparatus wherein said control unit controls the operation of the illumination device on the basis of a pattern of the calculated histogram (col. 6 line 62 – col. 7 line 4 and col. 7 lines 19-20.)

7. Regarding claim 4, Steinberg teaches all the limitations of claim 1 (see the 102 rejection to claim 1 supra), in addition to teaching an apparatus wherein said control unit controls the operation of the illumination device on the basis of the luminance signals which are used differently in accordance with a pattern of the calculated histogram (col. 7 lines 35-43.) For the purposes of claim interpretation, the Examiner finds the scaling of the histogram data, as found in the prior art, to be luminance signals that are used differently, as claimed in the instant application.

8. Regarding claim 5, Steinberg teaches all the limitations of claim 1 (see the 102 rejection to claim 1 supra), in addition to teaching an apparatus wherein said control unit controls the operation of the illumination device on the basis of luminance signals

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selected from the luminance signals in accordance with a pattern of the calculated histogram (col. 9 line 66 – col. 10 line 23.) For the purposes of claim interpretation, the Examiner finds the evaluation of select regions, as found in the prior art, to be luminance signals selected from the luminance signals, as claimed the instant application.

9. Regarding claim 6, Steinberg teaches all the limitations of claim 1 (see the 102 rejection to claim 1 supra), in addition to teaching an apparatus wherein when a pattern of the calculated histogram indicates that luminance signals concentrate on a predetermined luminance level to not less than a predetermined degree, said control unit controls the operation of the illumination device on the basis of luminance signals obtained by excluding the luminance signals of the predetermined luminance levels from the luminance signals (col. 10 lines 11-14.) For the purposes of claim interpretation, the Examiner finds the evaluation of region 3 within preset upper and lower limits, as found in the prior art, to be luminance signals obtained by excluding the luminance signals of the predetermined luminance levels from the luminance signals, as claimed the instant application.

10. Regarding claim 7, Steinberg teaches all the limitations of claim 1 (see the 102 rejection to claim 1 supra), in addition to teaching an apparatus wherein said control unit controls an amount of light emitted from the illumination device based on a result of the calculating (col. 3 lines 2-8.)

11. Regarding claim 8, Steinberg teaches all the limitations of claim 1 (see the 102 rejection to claim 1 supra), in addition to teaching an apparatus wherein said control unit

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calculates the histogram on the basis of a photometry result obtained by said photometric unit upon preliminary illumination on the object (col. 2 line 63 – col. 3 line 8.)

12. Regarding claim 9, Steinberg teaches all the limitations of claim 8 (see the 102 rejection to claim 8 supra), in addition to teaching an apparatus wherein said control unit controls the operation of the illumination device based on a result of the calculating when photography is performed (col. 5 lines 46-49.)

13. Regarding claim 10, Steinberg teaches all the limitations of claim 1 (see the 102 rejection to claim 1 supra), in addition to teaching an apparatus wherein said apparatus includes an image sensing apparatus (col. 6 lines 59-61.)

14. Regarding claim 11, Steinberg teaches all the limitations of claim 1 (see the 102 rejection to claim 1 supra), in addition to teaching an apparatus wherein said apparatus includes a camera (col. 2 lines 29-30.)

15. Regarding claims 12-17 and 18-20, although the wording is different, the material is considered substantively equivalent to claims 1-6 and 8, 10, and 11, respectively, as discussed above.

16. Regarding claim 21, Steinberg teaches an illumination device control method comprising: receiving object light, converting the object light into luminance signals of a plurality of areas, calculating a histogram of a luminance distribution on the basis of the converted luminance signals of the plurality of areas, and controlling operation of an illumination device for illuminating an object based on a result of the calculating (col. 2 line 57 – col. 3 line 8.)

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17. Regarding claim 22, although the wording is different, the material is considered substantively equivalent to claim 21 as discussed above.

Claim Rejections - 35 USC § 103

18. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

19. Claims 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Steinberg et al. (US #6,151,073) in view of Steinberg et al. (US #6,006,039.)

20. Regarding claim 23, Steinberg '073 teaches an intelligent flash system for a digital camera which functions by receiving object light, converting the object light into luminance signals of a plurality of areas, calculating a histogram of a luminance distribution on the basis of the converted luminance signals of the plurality of areas, and controlling operation of an illumination device for illuminating an object based on a result of the calculating ('073 col. 2 line 60 – col. 3 line 8), as well as teaching that this illumination system is controlled via programming (col. 7 lines 2-4; col. 8 lines 1-6.) However, Steinberg '073 fails to disclose a computer program product for supplying the control program for an illumination device. Nevertheless, Steinberg '039 teaches the use of a computer program product for supplying a control programs for cameras, including, but not limited to light sensing and flash control (col. 2 lines 17-32, and lines 56-59.) It would have been obvious to one of ordinary skill in the art at the time the

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invention was made to use a computer program product which supplies control programs as taught by Steinberg '039, to supply the control program for the illumination device as taught by Steinberg '073. One of ordinary skill in the art at the time the invention was made would have been motivated to make this combination in order for a camera's operational features to be configured through external means ('039 col. 2 lines 8-10.)

21. Regarding claim 24, Steinberg '073 and '039 teach all the limitations of claim 23 (see the 103 rejection to claim 23 supra), including the teaching wherein said computer program product includes a storage medium ('039 col. 2 lines 22-24.) It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a storage medium as taught by Steinberg '039, with the computer program product as taught by Steinberg '039 and '073. One of ordinary skill in the art at the time the invention was made would have been motivated to include a storage medium to increase the portability of the computer program, for example from one camera to another camera (col. 2 lines 64-66.)

22. Regarding claims 25 and 26, although the wording is different, the material is considered substantively equivalent to claims 23 and 24, as discussed above.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Serikawa (US #4,985,725) discloses an auto-flash photographing system that includes another type of photometry unit for detecting light reflecting from a subject.

Kondo (US #5,065,232) discloses a flash device used in relation to color temperature.

Takagi et al. (US #5,006,879) discloses an electronic flash lighting device for measuring both the brightness of a field to be photographed and the brightness of a plurality of divided areas of the field to produce a corresponding flash emission.

Mukai et al. (US # 4,705,382) discloses a flash photography apparatus comprising a plurality of photoelectric elements for measuring brightness of objects to be photographed.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary C. Vieaux whose telephone number is 703-305-9573. The examiner can normally be reached on Monday - Friday, 8:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on (703) 305-4929. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Gary C. Vieaux
Examiner
Art Unit 2612

Gcv2


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